

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference TCOM1008WO	FOR FURTHER ACTION	see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.
International application No. PCT/US93/07060	International filing date (day/month/year) 27 JULY 1993	(Earliest) Priority Date (day/month/year) 28 JULY 1992
Applicant 3COM CORPORATION		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of ____ sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. ☐ Certain claims were found unsearchable (See Box I).
2. ☐ Unity of invention is lacking (See Box II).
3. ☐ The international application contains disclosure of a nucleotide and/or amino acid sequence listing and the international search was carried out on the basis of the sequence listing
 - ☐ filed with the international application.
 - ☐ furnished by the applicant separately from the international application,
 - ☐ but not accompanied by a statement to the effect that it did not include matter going beyond the disclosure in the international application as filed.
 - ☐ transcribed by this Authority.
4. With regard to the title,
 - ☒ the text is approved as submitted by the applicant.
 - ☐ the text has been established by this Authority to read as follows:
5. With regard to the abstract,
 - ☐ the text is approved as submitted by the applicant.
 - ☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.
6. The figure of the drawings to be published with the abstract is:
Figure No. 2
 - ☐ as suggested by the applicant.
 - ☐ because the applicant failed to suggest a figure.
 - ☒ because this figure better characterizes the invention.

☐ None of the figures.

Box III TEXT OF THE ABSTRACT (Continuation of item 5 of the first sheet)

Early initiation of transmission of data in a network interface that includes a dedicated transmit buffer (34) is provided in a system which includes logic (39) for transferring frames of data composed by the host computer (30) into the transmit buffer. The amount of data of a frame which is downloaded by the host computer to the transmit buffer is monitored to make a threshold determination of an amount of data of the frame resident in the transmit buffer. The network interface controller includes logic (36) for initiating transmission of the frame when the threshold determination indicates that a sufficient portion of the frame is resident in the transmit buffer, prior to transfer of all of the data of the frame into the transmit buffer. The network interface controller includes a threshold store (43), which is programmable by the host computer for storing the threshold value. Thus, the threshold value may be set by the host system to optimize performance in a given setting.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US93/07060

A. CLASSIFICATION OF SUBJECT MATTER

IPC(5) :G06F 3/00, 11/00

US CL :364/239.51; 371/57.1; 395/250

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 364/239.51, 939.81; 370/85.1, 85.15; 371/57.1; 395/250

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
none

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

APS search terms: underrun, descriptor, buffer, incomplete frame

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X -- Y	US, A, 5,043,981 (FIROOZMAND ET AL) 27 August 1991 see: column 8, lines 41-44; column 10, lines 38-42, 46-52, 62-68; column 11, lines 4-7; figures 4, 5, 6, 16.	1, 3, 6, 11 ----- 2, 4, 5, 7-10, 12-15, 18-20
Y	US, A, 4,715,030 (KOCH ET AL) 22 December 1987 see: column 11, lines 54-65.	2, 7-9, 15
Y	US, A, 4,258,418 (HEATH) 24 March 1981 see: abstract; column 2, lines 20-27; column 3, lines 10-13; column 4, lines 5-9.	4, 5, 13-15, 18- 20
Y, P	US, A, 5,195,093 (TARRAB ET AL) 16 March 1993 see: column 3, lines 33-46.	10, 12, 19

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	*T	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
A document defining the general state of the art which is not considered to be part of particular relevance	*X*	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
E earlier document published on or after the international filing date	*Y*	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents; such combination being obvious to a person skilled in the art
L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*Z*	document member of the same patent family
O document referring to an oral disclosure, use, exhibition or other means		
P document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search

12 November 1993

Date of mailing of the international search report

07 DEC 1993

Name and mailing address of the ISA/US
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US93/07060

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y, P	US, A, 5,210,749 (FIROOZMAND) 11 May 1993 see: column 14, lines 56-63; column 18, lines 22-26.	13-15, 18-20